

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A cleaning composition in a solid state comprising:
a gas-releasing component as a cleaning agent selected from the group consisting of carbonates, bicarbonates, perborates, percarbonates, and mixtures thereof, wherein the gas-releasing component is present in an amount from 20% to 60% by weight;
potassium silicate as a solubility control component to limit the solubility of the cleaning composition, ~~wherein the potassium silicate is present in an amount from 5% to 35% by weight;~~
an alkalinity agent as a pH regulator, wherein the alkalinity agent is present in an amount from 1% to 35% by weight; and
a water softener to solvate metal ions in a solution of water, wherein the water softener is present in an amount from 1% to 20% by weight.
2. (original) The composition of claim 1, wherein the water softener is selected from the group consisting of ion exchange particles and salts of weak acids.
3. (original) The composition of claim 1, wherein the water softener is natural zeolite.
4. (currently amended) The composition of claim 1, wherein the water softener is synthetic zeolite ~~present in an amount sufficient to soften household water after the composition reaches an equilibrium concentration in a vessel, and the equilibrium concentration is diluted in a cleaning appliance.~~
5. (original) The composition in claim 1, wherein the gas-releasing component is sodium percarbonate.

6. (original) The composition in claim 1, wherein the gas-releasing component is sodium bicarbonate.

7. (currently amended) The composition in claim 1, wherein the gas-releasing component is sodium perborate monohydrate ~~earbonate~~.

8. (original) The composition in claim 1, wherein the gas-releasing component is present in an amount sufficient to release an effective amount of gas after the composition reaches an equilibrium concentration in a vessel, and the equilibrium concentration is diluted in a cleaning appliance.

9. (original) The composition in claim 8, wherein the effective amount of gas generated is from about 5% to about 9.5% by volume with respect to the volume of water.

10. (original) The composition of claim 1, wherein the alkalinity agent is selected from the group consisting of an alkali hydroxide, alkali hydride, alkali oxide, alkali sesquicarbonate, alkali carbonate, alkali phosphate, alkali borate, alkali salt of mineral acid, alkali amine, alkaloid, and alkali cyanide.

11. (original) The composition of claim 1, wherein the alkalinity agent is sodium carbonate.

12. (original) The composition of claim 1, wherein the alkalinity agent is present in an amount sufficient to give a solution of the composition a pH greater than 7.

13. (original) The composition of claim 1, wherein the alkalinity agent is present in an amount sufficient to give a solution of the composition a pH from about 7.8 to about 8.8.

14. (original) The composition of claim 1, further comprising an anti-redeposition component present in an amount from about 1% to 3% by weight.

15. (original) The composition of claim 1, wherein the cleaning composition is in a solid form having a surface area configuration designed to provide approximately constant surface area as the cleaning composition dissolves.

16. (currently amended) A cleaning composition in a solid state comprising:
a gas-releasing component as a cleaning agent selected which is sodium perborate monohydrate ~~percarbonate~~;
a solubility control component which is potassium silicate to limit the solubility of the cleaning composition;
an alkalinity agent as a pH regulator which is an alkali carbonate; and
a zeolite water softener to solvate metal ions in a solution of water.

17. (original) The composition of claim 16, wherein the gas-releasing component is present in an amount from 20% to 60% by weight.

18. (original) The composition of claim 16, wherein the solubility control component is present in an amount from 5% to 35% by weight.

19. (original) The composition of claim 16, wherein the water softener is present in an amount from 1% to 20% by weight.

20. (original) The composition of claim 16, wherein the gas-releasing component is present in an amount from 30% to 45% by weight, wherein the solubility control component is present in an amount from 20% to 35% by weight, wherein the water softener is present in an amount from 5% to 15% by weight, and wherein the alkalinity agent is present in an amount from 20% to 35% by weight.

21. (original) The composition of claim 16, wherein the alkalinity agent is present in an amount sufficient to give a solution of the composition a pH greater than 7.

22. (original) The composition of claim 16, wherein the alkalinity agent is present in an amount sufficient to give a solution of the composition a pH from about 7.8 to about 8.8.

23. (original) The composition of claim 16, further comprising an anti-redeposition component present in an amount from about 1% to 3% by weight.

24. (original) The composition of claim 16, wherein the cleaning composition is in a solid form having a surface area configuration designed to provide approximately constant surface area as the cleaning composition dissolves.

25. (currently amended) A method of making the a cleaning composition in solid state ~~of claim 1~~ comprising the steps of:

mixing ~~the a~~ gas releasing component, an optical brightener, an anti-redeposition component ~~the alkalinity agent~~, and ~~the a~~ water softener to form a dry mixture;
adding liquid potassium silicate while continuing to mix the dry mixture;
adding an alkalinity agent ~~small quantity of base, as a processing aid~~;
pouring the mixture into a mold; and
curing the cleaning composition.

26. (currently amended) The method of claim 25, wherein the ~~small~~ quantity of base is less than 1% by weight of the cleaning composition.

27. (currently amended) The method of claim 25, wherein the gas releasing component is sodium perborate monohydrate ~~percarbonate~~.

28. (currently amended) The method of claim 25, wherein the ~~alkalinity agent~~ is an alkali hydroxide ~~sodium carbonate~~.

29. (currently amended) The method of claim 25, wherein the water softener is a zeolite.

30. (currently amended) The method of claim 25, ~~further comprising an~~ wherein the anti-redeposition component is present in an amount from about 1% to 3% by weight of the cleaning composition.

31. (currently amended) The method of claim 25, wherein the gas releasing component is sodium perborate monohydrate ~~percarbonate~~, the alkalinity agent is an alkali hydroxide ~~sodium carbonate~~, and the water softener is a zeolite.

32. (currently amended) The method of claim 31, wherein the gas releasing component is present in an amount ~~from~~ of about 20% to 60% ~~38%~~ by weight of the cleaning composition, wherein the alkalinity agent is present in an amount ~~from~~ of about 1% to 35% ~~25%~~ by weight of the cleaning composition, wherein the water softener is present in an amount ~~from~~ of about 1% to 20% ~~8%~~ by weight of the cleaning composition.

33. (currently amended) The method of claim 32, ~~further comprising an~~ wherein the anti-redeposition component is carboxymethylcellulose present in an amount ~~from~~ of about 1% to 3% by weight of the cleaning composition.

34. (original) The method of claim 25, wherein the mold is configured to form a solid cleaning composition having a surface area configuration designed to provide approximately constant surface area as the cleaning composition dissolves.